

REMARKS

Entry of the above amendment is respectfully requested. Claims 17 – 19, 22, 26-27, 37, 40-41, 43-45 and 47-52 are pending in the present application. Claims 1-17, 20-21, 23-25, 28-36, 38-39, 42 and 46 are canceled. Claims 51-53 are newly added.

The Examiner has rejected all claims in this application under either 35 U.S.C. § 102(b) or 35 U.S.C. § 103(a) in view of U.S. Patent 5,791,353 (*Junemann et al.*)

Applicant would first point out that the apparatus of *Junemann et al.* is designed for a wholly different process as compared to the embodiments of the invention of the present application. The *Junemann et al.* apparatus is designed for the denitration of tobacco stem material by passage through a water bath. The embodiments of the Application are designed to pressure condition food and/or semi-luxury consumables, such as tobacco in particular, by means of pressurized steam, primarily to produce desirable moisture levels but also to expand and/or defibrate the materials if so desired.

In view of the different processes performed by the *Junemann et al* device as compared to the embodiments of the Application, although there is some superficial similarity of the two types of apparatus, there are in fact substantial structural differences as a result of the different applications.

In the embodiment illustrated in Figure 1 of the Application, there are cellular wheel sluices at the entrance and at the exit of the apparatus to feed the material to be conditioned into

and out of the apparatus. These cellular wheel sluices may be made pressure proof up to pressures of at least eleven bars. Such high pressure cellular wheel sluices would not have been obvious at the time the invention was made to a person having ordinary skill in the art. *Junemann et al.* only describes a device for diminishing the concentration of nitrate in tobacco material. Therefore, the overpressure with respect to the environment of the *Junemann et al.* device is disclosed at only “roughly 1.5 bar to approx. 3.0 bar” and “preferably roughly 0.9 bar”. The overpressure of *Junemann et al.* could be maintained even if massive leakage were to occur through the disclosed pressure tight locks. Such lower pressures are sufficient for diminishing concentration of nitrate in tobacco material.

However, the apparatus of embodiments of the present invention preferably operate at overpressure several times higher than *Junemann et al.* to make pressure-conditioning of tobacco material possible. This is realized in the embodiments of the invention by employing pressure proof cellular wheel sluices such as described in the present application. The pressure proof cellular wheel sluices make possible the expansion of tobacco material when leaving the pressure chamber through flash vaporization which results from a quick and significant pressure decrease. The pressure tight locks of *Junemann et al.* would not produce such results.

Additionally, the conveying screw in the hyperbaric chamber of the application has a progressive pitch in the direction of the apparatus exit, which helps to optimize the dwelling time of the material in the chamber, and the hyperbaric chamber may be variably inclined. There is also a feed shoe at the entrance to the hyperbaric pressure chamber, and a discharge shoe at the exit, and each such shoe is in flow communication with a steam extraction hood. Finally there is a

temperature adjustment mechanism at the entrance and exit sluices.

Each of the items described above distinguish the embodiments of the invention from the device disclosed in the *Junemann et al* reference cited, and each performs a function not disclosed or suggested by *Junemann et al* for the different process to which *Junemann et al* is directed.

Applicant has amended the claims in the Application to more distinctly point out the structural features of the embodiments of the invention which distinguish over *Junemann et al*. Moreover, it is respectfully pointed out that the incorporation of such features in the device of *Junemann et al*, is not even suggested therein, and would not be obvious modifications, since *Junemann et al* is directed to a completely different process.

In view of the amendments and the remarks and arguments submitted with this response to the office action dated January 12, 2007, it is submitted that this Application is now in condition for allowance, and such action is respectfully requested.

The Examiner is invited to call Applicant's Attorney if there are any further issues to be discussed.

Respectfully submitted,

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Date: April 5, 2007